# **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS for **IDAHO** 

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE. and

IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

IIIIIIIIIIIII AS OF IIIIIIIIIII MAR. 1, 1964

### UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

### PUBLISHED BY SOIL CONSERVATION SERVICE

| REPORTS                 | ISSUED                        | LOCATION                  | COOPERATING WITH   |
|-------------------------|-------------------------------|---------------------------|--|
| RIVER BASINS            |                               |                           |  |
| WESTERN UNITED STATES   | MONTHLY (FEBMAY)              | PORTLAND, OREGON.         | ALL COOPERATORS  |
| BASIC DATA SUMMARY      | OCTOBER 1                     | PORTLAND, OREGON          | ALL COOPERATORS  |
| STATES                  |                               |                           |  |
| AL ASK A                | MONTHLY (MARMAY)              | PALMER, ALASKA            | _ ALASKA S.C.D.  |
| AR I ZON A              | SEMI-MONTHLY (JAN.15 - APR.1) | PHOENIX, ARIZONA          | SALT R. VALLEY WATER USERS ASSOC<br>ARIZ. AGR. EXP. STATION                      |
| COLORADO AND NEW MEXICO | MONTHLY (FEBMAY)              | _ FORT COLLINS, COLORADO_ | - COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER             |
| IDAHO                   | MONTHLY (JANJUNE)_            | BOISE, IDAHO              | _ IDAHO STATE RECLAMATION ENGINEER   |
| MONTANA                 | MONTHLY (JANJUNE)_            | BOZEMAN, MONTANA          | _ MONT. AGR. EXP. STATION  |
| NE V A D A              | MONTHLY (JANMAY)              | _ RENO, NEVADA            | NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES |
| ORE GON                 | ( 3 NUL NAL ) YJHTNOM         | PORTLAND, OREGON          | OREG. STATE UNIVERSITY OREGON STATE ENGINEER                                     |
| UTAH                    | MONTHLY (JANJUNE)             | SALT LAKE CITY, UTAH      | _ UTAH STATE ENGINEER  |
| WASHINGTON              | MONTHLY (FEB. JUNE)_          | _ SPOKANE, WASHINGTON     | _ WN. STATE DEPT. OF CONSERVATION  |
| WYOMING                 | MONTHLY (FEBJUNE)             | _ CASPER, WYOMING         | _ WYOMING STATE ENGINEER   |
|                         | PUBLISHED B                   | Y OTHER AGENCIES          |  |
| REPORTS                 | ISSUED                        | . OTHER ADEROICS          | AGENCY   |
| SRITISH COLUMBIA        | MONTHLY (FEBJUNE)             |                           | S SERVICE, DEPT. OF LANDS,<br>RESOURCES, PARLIAMENT BLDG.,<br>CANADA             |
| CALIFORNIA              | MONTHLY (FEBMAY)              | CALLE, DEPT. OF           | WATER RESOURCES. P.O. BOX 388.   |

SACRAMENTO, CALIF.

## WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for

IDAHO

Report prepared by

MORLAN W. NELSON Snow Survey Supervisor

and

J. ALDEN WILSON Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION BOX 1247, BOISE, IDAHO

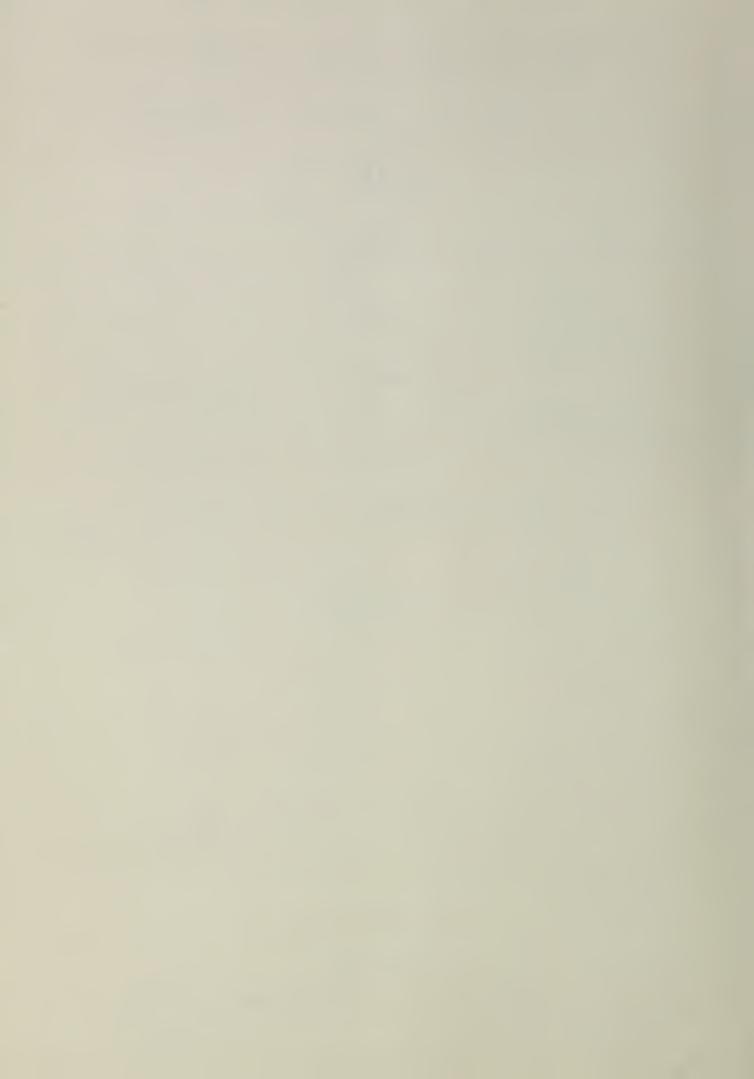
Issued by

LEE T. MORGAN

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE. IDAHO

CARL E. TAPPAN

STATE RECLAMATION ENGINEER DEPARTMENT OF RECLAMATION BOISE, IDAHO



## WATER SUPPLY OUTLOOK for IDAHO









### GENERAL SUMMARY - MARCH 1, 1964

The water supply outlook for Idaho took a significant drop during the month of February. Snow-water contents on the high mountainous areas fell from 10% to 40% in relation to normal. Precipitation in the valleys took a similar drop and prevailing temperatures were below normal for the month. Forecasts of streamflow throughout Idaho now vary from 55% of normal on the Bear River at Harer to 108% for the Big Lost River at Howell Ranch. In general, the April through September streamflow for the major rivers in the state are forecast to flow 10% to 20% below an average year.

Snowfall has continued to follow an unusual pattern this season. Valley and foothill areas have an extremely heavy snow cover for this time of the year while the high mountainous terrain has a snow pack well below normal. There have been so many years of light snow cover that it is difficult to evaluate our return to a near normal trend. Fortunately, at the valley and foothill elevations, south slope snow cover has melted off up to the 5,000 foot level or slightly higher. The snow cover on the north and level slopes, below 5,000 ft., still have a very heavy water content which has continued to build throughout the season.

Soil moisture sites indicate unfrozen soils beneath the snow pack throughout the state. The insulating effect of snow cover has resulted in soil temperatures varying from 32 degrees to 38 degrees. This includes the valley and foothill elevations where there is more than twelve to fifteen inches of snow remaining. The unfrozen soil is a very desirable condition because the soil can slow down runoff by absorbing melting snow or rain.

Several times during the past two winters, frozen soil has been a major factor in the fast heavy runoff occurring from snow-melt and rain. On all streams originating in the foothills, where a relatively heavy snow pack still remains, the snow poses a hazard, although somewhat reduced by February melting and the unfrozen soil. If a normal spring snow-melt occurs, these relatively large volumes of water in the valley and foothill areas can runoff evenly over a long period and not create problems. On the other hand, if Chinook winds or unseasonably warm weather should occur suddenly, accompanied by rain, heavy flows would occur on many streams which ordinarily flow very little or nothing.

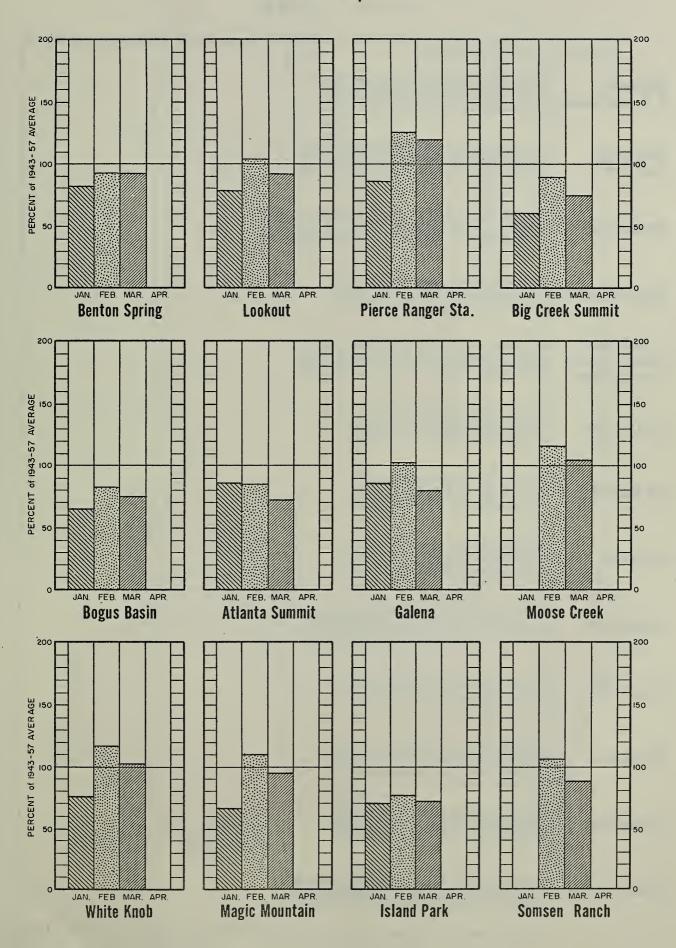
February is normally one of the heaviest months for snowfall. Light snowfall in the high mountainous terrain during the past month has changed the water outlook significantly. Normal or greater than normal snowfall in March is necessary to bring streamflow up to near average for 1964. The combination of stored water and good soil moisture can, in many cases, make up for the expected deficiencies in streamflow.

Reservoir-stored water throughout the state is generally good although, in several cases, slightly below normal for this time of the year. These exceptions are the Bear Lake, Oakley and Owyhee Reservoirs. Good streamflow forecasts for the Owyhee River indicate one of the best situations occurring there in the past five to ten years. The Bear River is below normal in stored water and has an unusually low inflow forecast.

### SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses As Compared To 1943-57 15Yr. Average

MARCH 1, 1964

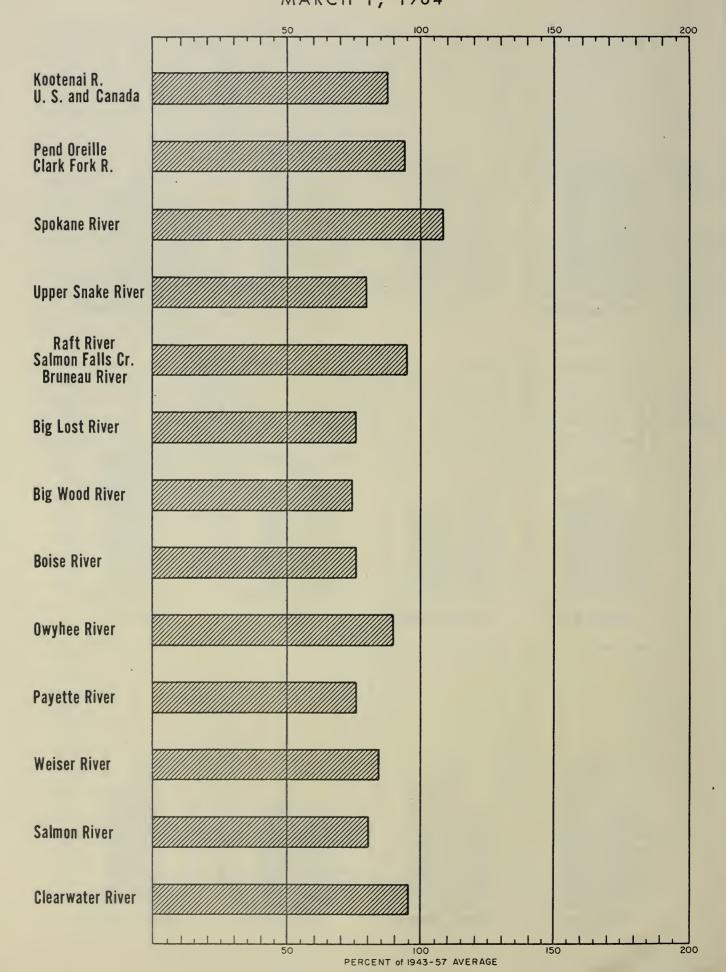


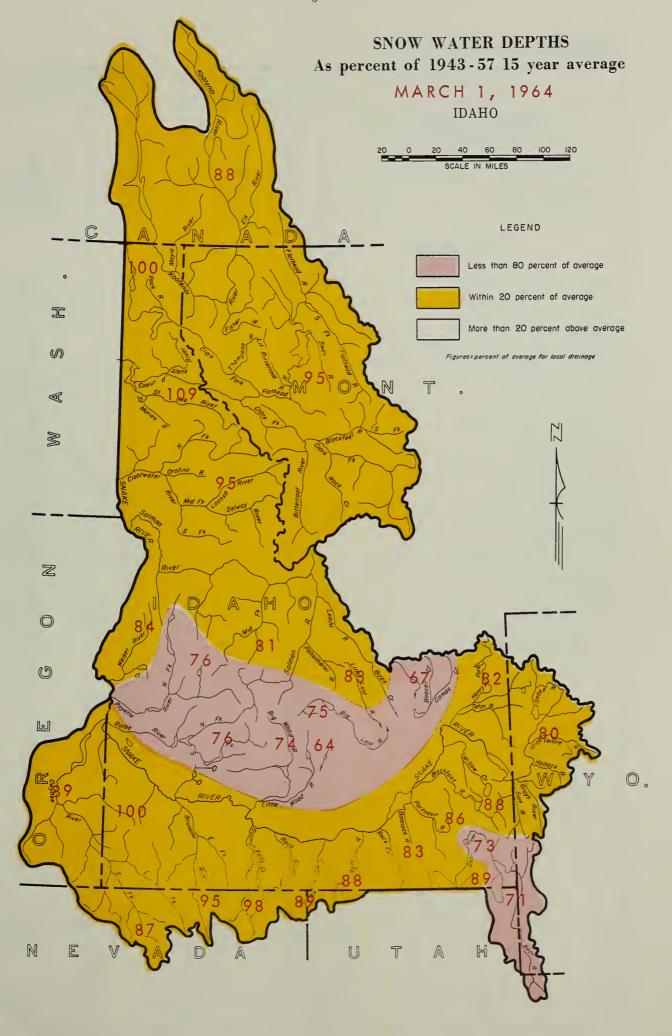
### SNOW WATER DEPTHS

BY DRAINAGE

### Compared To The 1943 - 57 15 Yr. Average

Snow Cover as of Approximately MARCH 1, 1964



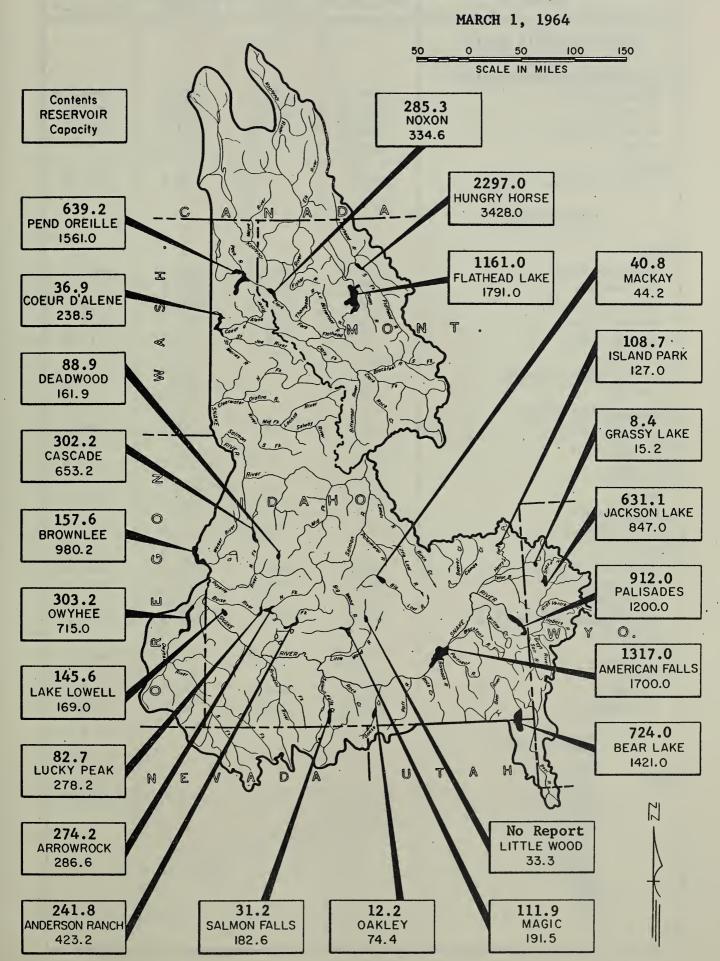


### COMPARISON of SNOW COVER

| RIVER BASIN WATERSHED           | NO. OF COURSES<br>AVERAGED |     | SNOW WATER —<br>S PERCENT OF :<br>AVERAGE b |
|---------------------------------|----------------------------|-----|---|
| UPPER COLUMBIA BASIN            |                            |     |   |
|                                 | 1.7                        | 124 | 00  |
| Kootenai River                  | 11                         | 134 | 88  |
| Pend Oreille - Clark Fork River | 40                         | 130 | 95  |
| Priest River                    | 2                          | 327 | 100   |
| Spokane River                   | 3-11                       | 198 | 109   |
| SNAKE BASIN                     |                            | - 1 |   |
| Upper Snake River               | 21                         | 123 | 80  |
| Mud Lake Drainages              | 2-4                        | 207 | 67  |
| Henry's Fork River              | 3-7                        | 146 | 82  |
| Teton River                     | 2-3                        | 161 | 75  |
| Blackfoot River                 | 3                          | 256 | 88  |
| Portneuf River                  | 3                          | 201 | 86  |
| Raft River                      | 2-7                        | 210 | 88  |
| Goose Creek                     | 2-3                        | 203 | 89  |
| Salmon Falls Creek              | 9-11                       | 253 | 98  |
| Bruneau River                   | 7                          | 215 | 95  |
| Little Lost River               | 5                          | 254 | 83  |
| Big Lost River                  | 5-10                       | 130 | 75  |
| Big Wood River                  | 7                          | 114 | 74  |
| Little Wood River               | 3-6                        | 120 | 64  |
| Boise River                     | 7-9                        | 168 | 76  |
| Owyhee River-Nevada             | 9                          | 472 | 87  |
| Owyhee River-Idaho              | 2-10                       | 506 | 100   |
| Payette River                   | 9                          | 170 | 76  |
| Weiser River                    | 2-4                        | 182 | 84  |
| Salmon River                    | 11-14                      | 135 | 81  |
| Lemhi River                     | 4                          | 145 |   |
| Clearwater River                | 7-15                       | 170 | 95  |
| Palouse                         | 5                          | 215 | 154   |
| GREAT BASIN                     |                            |     |   |
| Bear River                      | 13                         | 148 | 71  |
| Montpelier Creek                | 2-6                        | 141 | 93  |
| Mink Creek                      | 2-6                        | 142 | 73  |
| Cub River                       | 2                          | 380 | 89  |
| Malad River                     | 2                          | 291 | 83  |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     |   |
|                                 |                            |     | ,   |
|                                 |                            |     |   |

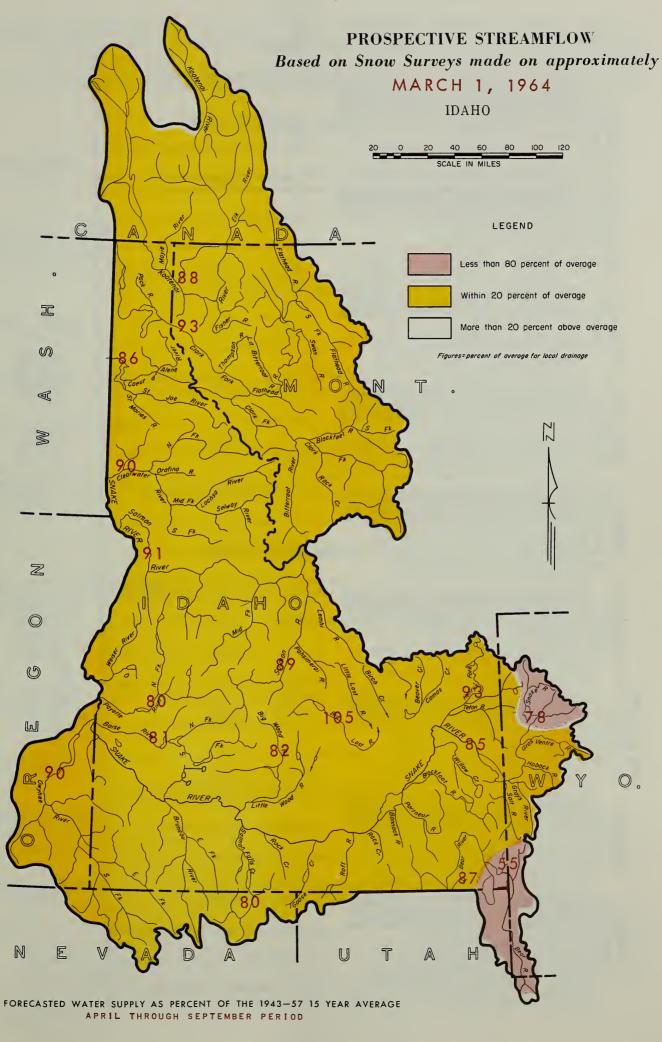
### RESERVOIR STORAGE

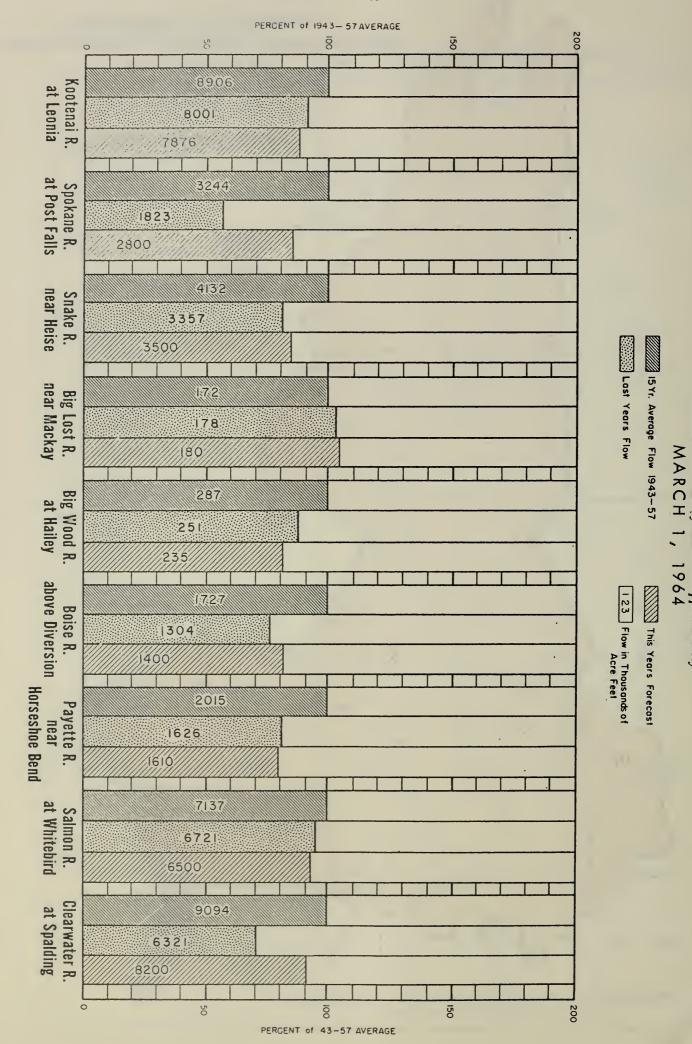
USABLE CONTENTS (1,000 Acre Feet)



RESERVOIR STORAGE (1,000 Ac. Ft.)

| RESERVOIR STORAGE (1,000 Ac. Ft.) |                 | ME        | ASURED (First of Mo | nth)            |
|-----------------------------------|-----------------|-----------|---------------------|-----------------|
| RESERVOIR                         | USABLE CAPACITY | THIS YEAR | LAST YEAR           | 1943-57 AVERAGE |
| UPPER COLUMBIA BASIN              |                 |           |                     |                 |
| OTTOM GODGED 21 DELOTE            |                 |           |                     |                 |
| Clark Fork - Pend Oreille         |                 |           |                     |                 |
| Hungry Horse                      | 3428.0          | 2297.0    | 2772.0              | 2369.0*         |
| Flathead                          | 1791.0          | 1161.0    | 1126.0              | 768.2           |
| Pend Oreille                      | 1561.0          | 639.2     | 663.9               | 540.9           |
| Noxon                             | 334.6           | 285.3     | 297.9               |                 |
| Spokane                           |                 |           |                     |                 |
| Coeur d'Alene                     | 238.5           | 36.9      | 158.9               | 131.9           |
| CMAYE DACEM                       |                 |           |                     |                 |
| <u>SNAKE</u> <u>BASIN</u>         |                 |           |                     |                 |
| Snake                             |                 |           |                     |                 |
| Jackson Lake                      | 847.0           | 631.1     | 581.7               | 465.5           |
| Palisades                         | 1200.0          | 912.0     | 1003.3              | 705.5           |
| American Falls                    | 1700.0          | 1317.0    | 1482.4              | 1425.8          |
| Island Park                       | 127.0           | 108.7     | 132.3               | 116.7           |
| Grassy Lake                       | 15.2            | 8.4       | 11.8                | 13.0            |
| Brownlee                          | 980.2           | 157.6     | 768.2               |                 |
| Goose-Trapper Creeks              |                 |           |                     |                 |
| Oakley                            | 74.4            | 12.2      | 17.4                | 18.5            |
| Salmon Falls Creek                |                 |           |                     |                 |
| Salmon Falls                      | 182.6           | 31.2      | 37.2                | 29.6            |
| Big Lost                          |                 |           |                     |                 |
| Mackay                            | 44.2            | 40.8      | 33.9                | 33.8            |
| Big Wood                          |                 |           |                     |                 |
| Magic                             | 191.5           | 111.9     | 172.2               | 128.2           |
| Little Wood Little Wood           | 22.2            | 37 7      | 01.0                |                 |
| Boise                             | 33.3            | No Report | 21.9                |                 |
| Anderson Ranch                    | 423.2           | 241.8     | 304.7               | 183.2*          |
| Arrowrock                         | 286.6           | 274.2     | 274.4               | 196.8           |
| Lucky Peak                        | 278.2           | 82.7      | 144.0               |                 |
| Lake Lowell (Deer Flat)           | 169.0           | 145.6     | 147.4               | 110.2           |
| Owyhee                            | 20710           | 213.0     | 21,14               | 12012           |
| Owyhee                            | 715.0           | 303.2     | 343.5               | 473.1           |
| Payette                           |                 |           |                     |                 |
| Cascade                           | 653.2           | 302.2     | 579.5               | 207.6*          |
| Deadwood                          | 161.9           | 88.9      | 96.8                | 83.3            |
|                                   |                 |           |                     |                 |
| GREAT BASIN                       |                 |           |                     |                 |
|                                   |                 |           |                     |                 |
| Bear                              | 1101            |           | 200                 | 22.5            |
| Bear Lake                         | 1421.0          | 724.0     | 761.4               | 815.6           |
|                                   |                 |           |                     |                 |
|                                   |                 |           |                     |                 |
|                                   |                 |           |                     |                 |
|                                   |                 |           |                     | 1 ===           |
|                                   |                 |           |                     |                 |
|                                   |                 |           |                     | 1               |
|                                   |                 |           |                     |                 |
|                                   |                 |           |                     |                 |





# STREAMFLOW FORECASTS (April through September period) Based on Snow Surveys made on approximately

WATER SUPPLY OUTLOOK ("Average" or "Excellent") and STREAMFLOW FORECASTS (1,000 Ac. Ft.)

STREAM and/or FORECAST POINT

OUTLOOK

FORECAST
THIS YEAR

FORECAST PERIOD

1943-57
AVERAGE

THIS YEAR

OF AVERAGE

1

|                                       | UPPER CO | LUMBIA E        | ASIN  |           |       |     |
|---------------------------------------|----------|-----------------|-------|-----------|-------|-----|
| KOOTENAI RIVER                        |          |                 |       |           |       |     |
| Leonia                                | (at)     | Avg.            | 7876  | Apr-Sep   | 8907  | 88  |
| Deomia                                | (ac)     | WA 2.           | 6823  | Apr-Jul   | 7817  | 87  |
|                                       |          |                 | 5450  | Apr-Jun   | 6255  | 87  |
| PEND OREILLE RIVER                    |          |                 | 3,30  | p. ou.    | 0.233 |     |
| Clark Fork River                      |          |                 |       |           |       |     |
| Whitehorse Rapids                     | (at)     | Avg.            | 13000 | Apr-Sep   | 13932 | 93  |
| , , , , , , , , , , , , , , , , , , , | ()       |                 | 11800 | Apr-Jul   | 12763 | 93  |
|                                       |          |                 | 10190 | Apr-Jun   | 10816 | 94  |
| Priest River                          |          |                 |       |           |       |     |
| Priest River 1/                       | (nr)     | Avg.            | 900   | Apr-Jul   | 904   | 99  |
| _                                     |          | , in the second |       | •         |       |     |
| SPOKANE RIVER                         |          |                 |       |           |       |     |
| Post Falls 2/                         | (at)     | Avg.            | 2800  | Apr-Sep   | 3242  | 86  |
|                                       |          |                 |       |           |       |     |
| Coeur d'Alene River                   |          |                 |       |           |       |     |
| Cataldo                               | (nr)     |                 | 1200  | Apr-Sep   | 1322  | 91  |
|                                       |          |                 | 1170  | Apr-Jul   | 1263  | 93  |
| St. Joe River                         |          |                 |       |           |       |     |
| Calder                                | (at)     |                 | 1190  | Apr-Sep   | 1391  | 86  |
|                                       |          |                 | 1160  | Apr-Jul   | 1323  | 88  |
|                                       |          |                 |       |           |       |     |
|                                       | SNAKE    | RIVER BA        | SIN   |           |       |     |
|                                       |          |                 |       |           |       |     |
| SNAKE RIVER - MAIN STEM               |          |                 |       |           |       |     |
| Moran <u>3</u> /                      | (at)     |                 | 720   | Apr-Sep   | 928   | 78  |
| Heise <u>4</u> /                      | (nr)     | Avg.            | 3500  | Apr-Sep   | 4132  | 85  |
| Blackfoot <u>5</u> /                  | (nr)     |                 | 3600  | Apr-Jul   | 4239  | 85  |
| Weiser                                | (at)     |                 | 6200  | Apr-Sep   | 7725  | 80  |
| 100                                   |          |                 |       |           |       |     |
| Henry's Fork                          |          |                 | 500   |           | (22   | 0.3 |
| Ashton 6/                             | (nr)     | Avg.            | 590   | Apr-Sep   | 632   | 93  |
| Rexburg 7/                            | (nr)     |                 | 1200  | Apr-Sep   | 1318  | 91  |
| m . n.                                |          |                 |       |           |       |     |
| Teton River                           | ()       | Anne            | 260   | Apr-Sep   | 425   | 85  |
| St. Anthony                           | (nr)     | Avg.            | 360   | Apr - Sep | 423   | 0,5 |
| Plankfoot Pinan                       |          |                 |       |           |       |     |
| Blackfoot River Blackfoot             |          | A 2.2.02        | 110   | Apr-Sep   |       |     |
| Reservoir Inflow                      |          | Avg.            | 110   | vhr - geh |       |     |
| reservoir introm                      |          |                 |       |           |       |     |
| Portneuf River                        |          |                 |       |           |       |     |
| Topaz                                 | (at)     | Avg.            | 70    | Mar-Sep   |       |     |
| 10/42                                 | (40)     | ****            | , ,   | -10.2 -OP |       |     |

<sup>(</sup>a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions. 1/Observed flow corrected for storage in Priest Lake. 2/Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie canals. 3/Corrected for storage in Jackson Lake. 4/Corrected for storage in Jackson Lake and Palisades. 5/Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot. 6/Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.

WATER SUPPLY OUTLOOK (expressed as "Paar", "Fair") and STREAMFLOW FORECASTS (1,000 Ac. Ft.)

| ATER SUPPLY OUILOOK ("Average" or    | ) and | STREAMFLUW FUREGASTS (T,UUU AC. Ft.) |                       |                    |                    |                                       |
|--------------------------------------|-------|--------------------------------------|-----------------------|--------------------|--------------------|---------------------------------------|
| STREAM and/or FORECAST POINT         |       | OUTLOOK                              | FORECAST<br>THIS YEAR | FORECAST PERIOD    | 1943-57<br>AVERAGE | THIS YEAR<br>AS PERCENT<br>OF AVERAGE |
| Salmon Falls Creek                   |       |                                      |                       |                    |                    |                                       |
| San Jacinto                          | (nr)  | Fair                                 | 70<br>68              | Mar-Sep<br>Mar-Jul | 88<br>85           | 80<br>80                              |
| Bruneau River                        |       |                                      | 00                    | 1141 541           | 03                 |                                       |
| Hot Springs                          | (nr)  | Avg.                                 | 200                   | Mar-Sep            | 235                | 85                                    |
| Little_Lost River                    |       |                                      |                       |                    |                    |                                       |
| Howe                                 | (nr)  | Avg.                                 | 39                    | Mar-Sep            | 37.                | 5 104                                 |
| Big Lost River                       |       |                                      |                       |                    |                    |                                       |
| Howell Ranch                         | (at)  | Avg.                                 | 150                   | Apr-Jun            | 139                | 108                                   |
| Mackay <u>1</u> /                    | (nr)  |                                      | 180                   | Apr-Sep            | 172                | 105                                   |
| Big Wood River                       |       |                                      |                       |                    |                    |                                       |
| Hailey <u>2</u> /<br>Magic Reservoir | (at)  | Avg.                                 | 280                   | Apr-Sep            | 340                | 82                                    |
| Inflow 3/                            |       |                                      | 250                   | Mar-Jul            | 309                | 81                                    |
| Little Wood River                    |       |                                      |                       |                    |                    |                                       |
| High Five Creek                      | (ab)  | Fair                                 | 70                    | Apr-Sep            | 87                 | 80                                    |
| Boise River                          |       |                                      |                       |                    |                    |                                       |
| Twin Springs                         | (nr)  |                                      | 670                   | Apr-Sep            | 791                | 85                                    |
| 2                                    | , ,   |                                      | 625                   | Apr-Jul            | 737                | 85                                    |
| Boise 4/                             | (nr)  | Avg.                                 | 1400                  | Apr-Sep            | 1727               | 81                                    |
| South Fork                           |       |                                      |                       |                    |                    |                                       |
| Anderson Dam <u>5</u> /              | (at)  |                                      | 485                   | Apr-Sep            | 646                | 75                                    |
| Owyhee River                         |       |                                      |                       |                    | 0.6                | 0 05                                  |
| Gold Cr., Nev. 6/                    | (nr)  |                                      | 23                    | Apr-Jul            | 26.                |                                       |
| Owyhee, Nev. 6/                      | (nr)  | A                                    | 70                    | Apr-Jul<br>Apr-Sep | 86.<br>430         | 90                                    |
| Lake Owyhee net inflow 7/            |       | Avg.                                 | 385                   | Mar-Jul            | 524                | 94                                    |
| net iniiow <u>j</u> j                |       |                                      |                       | rial -Jul          | 324                | 74                                    |
| Payette River                        |       |                                      |                       |                    |                    |                                       |
| Horseshoe Bend <u>8</u> /            | (nr)  | Avg.                                 | 1610                  | Apr-Sep            | 2016               | 80                                    |
| North Fork                           |       |                                      |                       |                    |                    |                                       |
| Cascade 9/                           | (at)  |                                      | 495                   | Apr-Sep            | 618                | 80                                    |
| Banks 9/                             | (nr)  |                                      | 635                   | Apr-Sep            | 793                | 80                                    |
| South Fork                           |       |                                      | 615                   | Apr-Jul            | 765                | 80                                    |
| Banks 10/                            | (nr). |                                      | 860                   | Apr-Jul            | 1077               | 80                                    |
|                                      |       |                                      |                       |                    |                    |                                       |

<sup>(</sup>a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions. 1/Observed flow corrected for storage in Mackay Reservoir and diversion in Sharp Ditch. 2/Combined discharge of Big Wood River and Big Wood Slough corrected for diversions. 3/Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine. 4/Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 5/Corrected for storage in Anderson Ranch Reservoir. 6/Corrected for storage in Wild Horse Reservoir. 7/From U.S.B.R. records of inflow. 8/Corrected for storage in Cascade and Deadwood Reservoirs. 9/Corrected for storage in Cascade Reservoir.

WATER SUPPLY OUTLOOK ("Average" or "Excellent") and STREAMFLOW FORECASTS (1,000 Ac. Ft.)

| WATER COTTER COTECON ( Average                              | or excellent | ") unu    | OTHER MILE            | " TONEONOTO (                 | 1,000 AU.          | 1 (. )                          |
|---|--------------|-----------|-----------------------|-------------------------------|--------------------|---------------------------------|
| STREAM and/or FORECAST POIN                                 | it           | OUTLOOK   | FORECAST<br>THIS YEAR | FORECAST PERIOD               | 1943-57<br>AVERAGE | THIS YEAR AS PERCENT OF AVERAGE |
| <u>Weiser River</u><br>Weiser ab. Crane<br>Creek <u>1</u> / |              | Avg.      | 520                   | Mar-Sep                       | 575                | 90                              |
| Salmon River Whitebird Challis                              | (at)<br>(nr) | Avg.      | 6500<br>850<br>755    | Apr-Sep<br>Apr-Sep<br>Apr-Jul | 7137<br>959<br>839 | 91<br>89<br>90                  |
| <u>Clearwater River</u><br>Spalding<br>Kamiah               | (at)<br>(at) | Avg.      | 8200<br>4700          | Apr-Sep<br>Apr-Jul            | 9094<br>4901       | 90<br>92                        |
| North Fork<br>Ahsahka                                       | (nr)         |           | 2810                  | Apr-Jul                       | 3086               | 91                              |
|   |              | GREAT BAS | IN                    |                               |                    |                                 |
| BEAR RIVER<br>Harer   | (at)         | Poor      | 165                   | Apr-Sep                       | 299                | 55                              |
| Montpelier Creek<br>Montpelier                              | (nr)         | Avg.      | 11.5                  | Apr-Sep                       | 13.1               | 88                              |
| Cub River<br>Preston  | (nr)         | Avg.      | 45                    | Apr-Sep                       | 52                 | 87                              |

<sup>(</sup>a) Includes seasonal runoff, stored water, diversions and other sources. (c) Assuming normal meteorological conditions.  $\underline{1}$ / Observed flow of Weiser River nr. Weiser minus observed flow of Crane Creek at mouth.

VALLEY PRECIPITATION 1/
Division Averages and Departures
In Inches

|                          |          | Fall         | W                   | linter       |  |  |
|--------------------------|----------|--------------|---------------------|--------------|--|--|
| DRAINAGE                 | SepOc    | tNov. 1963   | Dec. 1963-Feb. 1964 |              |  |  |
| DIVISIONS                | Observed | Departure 2/ | Observed            | Departure 2/ |  |  |
|                          |          |              |                     |              |  |  |
| Kootenai, Canada & U. S. | 7.28     | +1.19        | 6.79                | -2.02        |  |  |
| Flathead                 | 4.34     | -0.87        | 4.67                | -1.50        |  |  |
| Clark Fork               | 3.40     | +0.50        | 2.51                | -0.15        |  |  |
| Pend Oreille-Spokane     | 8.05     | -0.78        | 9.06                | -2.42        |  |  |
| Upper Snake              | 6.51     | +1.68        | 5.28                | -1.46        |  |  |
| Snake River Plain        | 3.00     | +0.90        | 1.98                | -0.75        |  |  |
| Salmon-Payette-Boise     | 5.39     | +0.68        | 5.69                | -1.86        |  |  |
| Clearwater               | 5.46     | -1.24        | 7.28                | -1.05        |  |  |
| Southeastern Oregon      | 3.32     | +0.95        | 2.52                | -0.94        |  |  |
|                          |          |              |                     |              |  |  |

Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

<sup>2/</sup> Departure from 15-year (1943-57) drainage division average.

| SNOW                           |     |           | CUR    | RENT INFORM | ATION            | PAST R     | ECORD        |
|--------------------------------|-----|-----------|--------|-------------|------------------|------------|--------------|
| DRAINAGE BASIN and SNOW COURSE |     |           |        | SNOW DEPTH  | WATER<br>CONTENT | WATER CONT | ENT (Inches) |
| NAME                           | NO. | ELEVATION | SURVEY | (Inches)    | (Inches)         | LAST YEAR  | AVERAGE b    |

### UPPER COLUMBIA BASIN

|   | 011   | DIC CODO   | IDIA DA  | <u> </u>   |   |   |   |
|---|---|--|--|--|---|---|---|
| PRIEST RIVER  |   |  |  |  |   |   |   |
| Benton Meadow   | 16A2  | 2344   | 2/27   | 26   | 7.8   | 0.4   | 6.5   |
| Benton Spring   | 16A3  | 4900   | 2/28   | 52   | 19.0  | 7.8   | 20.4  |
| Schweitzer Bowl   | 16A6  | 4500   | 2/27   | 85   | 29.2  | ••  |   |
| Schweitzer Ridge  | 16A5  | 6100   | 2/27   | 106  | 41.2  |   | ₩ ₩   |
| SPOKANE RIVER   |   |  |  |  |   |   |   |
| Copper Ridge  | 16B2  | 4800   | 3/2  | 85   | 32.1  | 10.4  | 27.2  |
| Fourth of July Smt.   | 16B3  | 3100   | 2/27   | 39   | 13.0  | T   |   |
| Granite Peak  | 15B13   | 6000   | 2/25   | 95   | 34.5  | 28.5  | ••  |
| Kellogg Peak (A)  | 16B5  | 5560   | 2/26   | 85   | 30.3  | 7.7   |   |
| Lookout   | 15B2  | 5250   | 2/27   | 89   | 31.7  | 19.3  | 34.0*                                       |
| Lower Sands Creek   | 16B1  | 3400   | 3/2  | 65   | 22.8  | 7.0   | 18.5*                                       |
| Medicine Ridge  | 15B4  | 6150   | 2/25   | 102  | 35.1  | 33.3  |   |
| Mosquito Ridge (A)  | 16A4  | 5110   | 2/26   | 107  | 38.1  | 19.6  |   |
| Outlaw Creek  | 15B12   | 3750   | 2/25   | 47   | 14.4  | 4.9   |   |
| Roland Summit (A)   | 15B5  | 5200   | 3/26   | 96   | 34.2  | 13.8  |   |
| Sherwin   | 16C1  | 3200   | 2/29   | 53   | 18.4  | 3.7   |   |
| Sunset (A)  | 15B9  | 5600   | 2/26   | 104  | 37.0  | 18.0  |   |
|   |   |  |  |  |   |   |   |
|   |   | SNAKE  | BASIN  |  |   |   |   |
| MEDICINE LODGE - MUD  | LAKE DRA  |  | BASIN  |  |   |   |   |
|   |   | INAGES   |  | 26   | E 7   | 2.0   | 0.2   |
| Camp Creek  | 12E3  | ENAGES<br>6800   | 2/26   | 26   | 5.7   | 3.0   | 9.2   |
| Camp Creek Irving Creek   | 12E3<br>12E4  | 6800<br>7035   | 2/26<br>2/27   | 20   | 4.2   | 1.9   |   |
| Camp Creek Irving Creek Kilgore   | 12E3<br>12E4<br>11E12   | 6800<br>7035<br>6200   | 2/26<br>2/27<br>2/28   | 20<br>28   | 4.2<br>6.9  | 1.9<br>3.6  | 9.5   |
| Camp Creek Irving Creek   | 12E3<br>12E4  | 6800<br>7035   | 2/26<br>2/27   | 20   | 4.2   | 1.9   |   |
| Camp Creek Irving Creek Kilgore   | 12E3<br>12E4<br>11E12<br>12E5   | 6800<br>7035<br>6200   | 2/26<br>2/27<br>2/28   | 20<br>28   | 4.2<br>6.9  | 1.9<br>3.6  | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek HENRY'S FORK - TETON   | 12E3<br>12E4<br>11E12<br>12E5   | 6800<br>7035<br>6200   | 2/26<br>2/27<br>2/28   | 20<br>28   | 4.2<br>6.9  | 1.9<br>3.6  | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek  | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER  | 6800<br>7035<br>6200<br>6700   | 2/26<br>2/27<br>2/28<br>2/27   | 20<br>28<br>17   | 4.2<br>6.9<br>3.1   | 1.9<br>3.6<br>1.1   | 9.5<br>                                     |
| Camp Creek Irving Creek Kilgore Webber Creek HENRY'S FORK - TETON Big Springs   | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9  | 6800<br>7035<br>6200<br>6700   | 2/26<br>2/27<br>2/28<br>2/27   | 20<br>28<br>17   | 4.2<br>6.9<br>3.1   | 1.9<br>3.6<br>1.1   | 9.5<br>                                     |
| Camp Creek Irving Creek Kilgore Webber Creek HENRY'S FORK - TETON Big Springs Darby Canyon (A)  | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21   | 6800<br>7035<br>6200<br>6700   | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28   | 20<br>28<br>17<br>53<br>55   | 4.2<br>6.9<br>3.1<br>14.9<br>17.8   | 1.9<br>3.6<br>1.1<br>9.2<br>11.7  | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek HENRY'S FORK - TETON Big Springs Darby Canyon (A) Island Park  | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10  | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315   | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25   | 20<br>28<br>17<br>53<br>55<br>43                                     | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1   | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2                               | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek  HENRY'S FORK - TETON  Big Springs Darby Canyon (A) Island Park Latham Springs Lucky Dog Old Road  | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10<br>11E16<br>11E14<br>11E15                 | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315<br>7650<br>6900<br>7250                         | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25<br>2/25                                 | 20<br>28<br>17<br>53<br>55<br>43<br>76<br>55<br>67                   | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1<br>23.0<br>15.6<br>20.2                         | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2<br>14.8                       | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek  HENRY'S FORK - TETON  Big Springs Darby Canyon (A) Island Park Latham Springs Lucky Dog Old Road Pine Creek Pass                            | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10<br>11E16<br>11E14<br>11E15<br>11F2         | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315<br>7650<br>6900<br>7250<br>6750                 | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25<br>2/25<br>2/25<br>2/28                 | 20<br>28<br>17<br>53<br>55<br>43<br>76<br>55<br>67<br>43             | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1<br>23.0<br>15.6<br>20.2<br>13.3                 | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2<br>14.8<br>7.7                | 9.5   |
| Camp Creek Irving Creek Kilgore Webber Creek  HENRY'S FORK - TETON  Big Springs Darby Canyon (A) Island Park Latham Springs Lucky Dog Old Road Pine Creek Pass Poacher's Cabin            | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10<br>11E16<br>11E14<br>11E15<br>11F2<br>11F2 | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315<br>7650<br>6900<br>7250<br>6750<br>8000         | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25         | 20<br>28<br>17<br>53<br>55<br>43<br>76<br>55<br>67<br>43<br>79       | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1<br>23.0<br>15.6<br>20.2<br>13.3<br>25.7         | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2<br>14.8<br>7.7<br>17.8        | 20.4  |
| Camp Creek Irving Creek Kilgore Webber Creek  HENRY'S FORK - TETON  Big Springs Darby Canyon (A) Island Park Latham Springs Lucky Dog Old Road Pine Creek Pass Poacher's Cabin State Line | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10<br>11E16<br>11E14<br>11E15<br>11F2<br>11F1 | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315<br>7650<br>6900<br>7250<br>6750<br>8000<br>6400 | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25<br>2/28 | 20<br>28<br>17<br>53<br>55<br>43<br>76<br>55<br>67<br>43<br>79<br>41 | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1<br>23.0<br>15.6<br>20.2<br>13.3<br>25.7<br>12.2 | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2<br>14.8<br>7.7<br>17.8<br>5.9 | 9.5<br><br>20.4<br><br>15.7<br><br><br>13.8 |
| Camp Creek Irving Creek Kilgore Webber Creek  HENRY'S FORK - TETON  Big Springs Darby Canyon (A) Island Park Latham Springs Lucky Dog Old Road Pine Creek Pass Poacher's Cabin            | 12E3<br>12E4<br>11E12<br>12E5<br>RIVER<br>11E9<br>10F21<br>11E10<br>11E16<br>11E14<br>11E15<br>11F2<br>11F2 | 6800<br>7035<br>6200<br>6700<br>6500<br>8250<br>6315<br>7650<br>6900<br>7250<br>6750<br>8000         | 2/26<br>2/27<br>2/28<br>2/27<br>2/26<br>2/28<br>2/27<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25<br>2/25         | 20<br>28<br>17<br>53<br>55<br>43<br>76<br>55<br>67<br>43<br>79       | 4.2<br>6.9<br>3.1<br>14.9<br>17.8<br>11.1<br>23.0<br>15.6<br>20.2<br>13.3<br>25.7         | 1.9<br>3.6<br>1.1<br>9.2<br>11.7<br>7.6<br>15.6<br>12.2<br>14.8<br>7.7<br>17.8        | 20.4  |

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. • Estimated 1943-57, 15 year Average.

(A) Aerial observation: Water content estimated.

CURRENT INFORMATION

PAST RECORD

1.2

T

5.0

3.2

4.2

5.8

3.8

9.6

6.5

8.9

5.6\*

4.9\*

11.5\* 9.3\*

10.4\*

SNOW

| DRAINAGE BASIN and SN | OW COURSE    |           | DATE OF | SNOW DEPTH | WATER<br>CONTENT | WATER CONTE | ENT (Inches  |
|-----------------------|--------------|-----------|---------|------------|------------------|-------------|--------------|
| NAME                  | NO.          | ELEVATION | SURVEY  | (Inches)   | (Inches)         | LAST YEAR   | AVERAGE      |
|                       |              |           |         |            |                  |             |              |
| LACKFOOT - PORTNEUF   | RIVERS       |           |         |            |                  |             |              |
|                       |              | 64.50     | 2/20    | 2.1        | <b>7</b> 9       | 2.0         | <b>~</b> 7 9 |
| ustin Bros Ranch      | 11G3         | 6450      | 2/28    | 31         | 7.2              | 2.0         | 7.1          |
| China Hat             | 11G2         | 6300      | 2/27    | 25         | 5.8              | T           | 7.6          |
| empsey Creek          | 12G5         | 6280      | 2/28    | 32         | 8.2              | 4.2         | 9.8          |
| link Creek            | 12G1         | 6300      | 2/27    | 45         | 12.9             | 6.2         | 14.2         |
| ebble Creek           | 12G2         | 6550      | 2/28    | 37         | 10.8             | 5.5         | 13.0         |
| lug Creek Divide      | 11G5         | 7225      | 2/25    | 43         | 12.0             | 11.2        |              |
| omsen Ranch           | 11G1         | 7000      | 2/27    | 37         | 9.6              | 6.8         | 10.9         |
| AFT RIVER, GOOSE CRE  | EK, SALM     | ON FALL   | S CREE  | K, BRUNE   | AU RIVE          | R           |              |
| adger Gulch           | 14G3         | 6660      | 2/28    | 34         | 9.7              | 2.7         | 11.7         |
| ear Creek             | 15H1         | 7800      | 2/27    | 51         | 12.8             | 9.4         | 16.9         |
| ostetter R. S.        | 14G1         | 7500      | 2/28    | 49         | 16.6             | 8.9         | 17.          |
| oy Scout Camp         | 13G2         | 7600      | 2/28    | 36         | 10.5             | 7.4         |              |
| edar Creek            | 13G2<br>14G5 | 7000      | 2/27    | 37         | 11.2             | T           | 10.          |
| lear Creek Meadows    | 13H2         | 9050      | 2/29    | 48         | 14.2             | 9.7         |              |
| eadline               | 14G4         | 6900      | 2/27    | 60         | 19.8             | 9.0         | 19.9         |
| ox Creek              | 15H2         | 6800      | 2/27    | 35         | 10.2             | 2.3         | 9.4          |
| oat Creek             | 15H2         | 8800      | 2/27    | 47         | 13.9             | 10 .1       | 15.          |
| owell Canyon          | 13G1         | 8000      | 2/28    | 56         | 19.4             | 10.9        | 24.3         |
| ummingbird Springs    | 15H15        | 8945      | 2/27    | 56         | 16.9             | 9.2         | 18.3         |
|                       |              |           | -       |            |                  | 7.1         | 17.          |
| agic Mountain         | 14G2         | 6700      | 2/29    | 50         | 16.4             |             | 1/.          |
| ne Mile Summit        | 13H1         | 7330      | 2/29    | 25         | 6.8              | 3.3         | 16.0         |
| ole Creek R. S.       | 15H14        | 8330      | 2/27    | 55         | 16.5             | 8.7         | 10.0         |
| ed Point (A)          | 15H18        | 7940      | 2/27    | 42         | 12.6             | 1.5         | oso ema      |
| heep Hollow           | 13G5         | 6200      | 2/28    | 22         | 6.7              | 1.5         | , .          |
| hoshone Basin         | 14G6         | 5740      |         | 28         | 8.6              |             | 4.           |
| ublett                | 13G3         | 6000      | 2/29    | 36         | 11.1             |             | 10.          |
| ummit Springs         | 13G4         | 8500      |         | 33         | 9.8              |             | 1910 000     |
| i Pont                | 13H3         |           |         | 32         | 9.0              |             | 600 MD       |
| ilson Creek (A)       | 15G2         | 7500      | 2/27    | 44         | 13.2             | 2.9         | 400 em       |
| ITTLE LOST RIVER      |              |           |         |            |                  |             |              |
|                       |              |           |         |            |                  |             |              |

13E5

13E3

13E6

13E4

13E7

5850

5700

7250

6000

8175

2/27

2/27

2/27

2/27

2/26

26

19

36

28

35

Fairview Guard Sta.

Lost-Garfield

Sawmill Canyon

Wet Creek Summit

Moonshine

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average. (A) Aerial observation: Water content estimated.

CURRENT INFORMATION

SNOW

PAST RECORD

|                       | DRAINAGE BASIN and SNOW COURSE |            | DATE OF SURVEY | SNOW DEPTH | WATER<br>CONTENT | WATER CONTENT (Inches) |         |  |
|-----------------------|--------------------------------|------------|----------------|------------|------------------|------------------------|---------|--|
| NAME                  | NO.                            | ELEVATION  | SURVET         | (Inches)   | (Inches)         | LAST YEAR              | AVERAGE |  |
|                       |                                |            |                |            |                  |                        |         |  |
| BIG LOST RIVER        |                                |            |                |            |                  |                        |         |  |
|                       |                                |            |                |            |                  |                        |         |  |
| Bear Canyon           | 13F3                           | 8600       | 2/28           | 42         | 12.3             | 9.0                    | 16.6    |  |
| Cherry Creek Pass (A) | 13F13                          | 8900       | 2/28           | 5          | 1.2              | 1.6                    |         |  |
| Copper Basin          | 13F2                           | 8000       | 2/28           | 22         | 6.7              | 4.0                    | 9.2     |  |
| Iron Bog              | 13F11                          | 7650       | 2/28           | 35         | 10.4             | 6.4                    |         |  |
| Leadbelt              | 13F12                          | 6800       | 2/28           | 25         | 6.4              | 4.3                    |         |  |
| Lost-Wood Divide (A)  | 14F3                           | 8750       | 2/28           | 51         | 16.0             | 14.9                   | 22.9    |  |
| North Fork Meadow (A) | 14F15                          | 8150       | 2/28           | 28         | 8.5              | 6.1                    |         |  |
| Slickrock (A)         | 13F14                          | 8640       | 2/28           | 38         | 11.1             | 11.1                   |         |  |
| Stickney Mill         | 14F2                           | 7500       | 2/28           | 24         | 5.8              | 5.2                    | 8.8     |  |
| Thite Knob            | 13F1                           | 7700       | 2/25           | 28         | 8.1              | 4.1                    | 7.9     |  |
| IG WOOD RIVER         |                                |            |                |            |                  |                        |         |  |
| ollarhide Summit      | 14F8                           | 8620       | 2/28           | 49         | 17.4             | 17.8                   | 23.8    |  |
| alena                 | 14F1                           | 7500       | 2/29           | 47         | 14.0             | 11.4                   | 17.6    |  |
| alena Summit          | 14F12                          | 8795       | 2/29           | 55         | 17.2             | 14.9                   | 20.3    |  |
| raham Ranch           | 14F5                           | 6200       | 2/26           | 35         | 10.4             | 9.0                    | 12.9    |  |
| lascot Mine           | 14F7                           | 7900       | 2/27           | 31         | 9.5              | 8.4                    | 14.2    |  |
| lount Baldy           | 14F9                           | 9000       | 2/26           | 47         | 13.6             | 10.6                   | 18.2    |  |
| oldier Rgr. Sta.      | 14F11                          | 6100       | 2/29           | 25         | 6.4              | 5.2                    | 12.3    |  |
|                       |                                |            |                |            |                  |                        |         |  |
| Little Wood River - 1 | Fish Cr                        | <u>eek</u> |                |            |                  |                        |         |  |
|                       |                                |            |                |            |                  |                        |         |  |
| arfield R. S.         | 13F4                           | 6554       | 2/24           | 27         | 6.6              | 5.7                    | 10.9    |  |
| ron Mine Creek        | 13F10                          | 6370       | 2/25           | 27         | 6.9              | 6.3                    |         |  |
| uldoon                | 13F5                           | 6300       | 2/24           | 22         | 5.6              | 5.8                    | 8.4     |  |
| orcupine (A)          | 14F14                          | 8350       | 2/28           | 44         | 12.4             | 9.6                    |         |  |
| wede Peak             | 13F9                           | 7500       | 2/25           | 40         | 11.3             | 9.4                    |         |  |
| elfer Ranch           | 13F6                           | 6000       | 2/25           | 22         | 5.4              | 3.4                    | 8.1     |  |
| OISE RIVER            |                                |            |                |            |                  |                        |         |  |
| tlanta Summit         | 15F4                           | 7500       | 2/25           | 66         | 23.4             | 22.0                   | 31.9    |  |
| ad Bear               | 15F2                           | 5500       | -              |            | 12.1             |                        |         |  |
| ennett Mountain       | 15F7                           | 6650       | 2/26           |            | 15.6             |                        |         |  |
|                       | 16F4                           | 5360       | 2/27           |            | 9.4              |                        | 6.7     |  |
| amas Creeks Divide(A) | 15F9                           | 5720       | 2/26           |            |                  |                        |         |  |
| anskin (A)            | 15F10                          | 5650       | 2/26           |            | 12.7             | 1.2                    |         |  |
| ackson Peak (A)       | 15E9                           | 7000       | 2/25           |            | 21.0             | 17.5                   | 30.6    |  |
| ittle Camas Flat (A)  | 15F12                          | 4950       | 2/26           |            | 9.4              |                        |         |  |
| ong Tom (A)           | 15F13                          | 4550       | •              |            | 7.8              |                        |         |  |
| oores Creek Summit    | 15F1                           | 6100       | 2/28           |            | 22.0             |                        |         |  |
|                       | 15F6                           | 5600       | 2/28           | 27         | 6.3              | 0.0                    | 6.5     |  |

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average.

(A) Aerial observation: Water content estimated.

APPENDIX 4 SNOW CURRENT INFORMATION PAST RECORD WATER DRAINAGE BASIN and SNOW COURSE SNOW DEPTH WATER CONTENT (Inches) DATE OF SURVEY (Inches) ELEVATION NAME (Inches) LAST YEAR AVERAGE b 2.1 2/25 36 11.2 Road Creek (A) 15F3 6800 7400 2/25 72 26.4 26.4 Trinity Mountain 15F5 0.0 21 6.8 Willow Creek Cabin (A) 15F11 4710 2/26 OWYHEE RIVER 2/26 8.5 0.0 16G6 5900 27 Antelope Ridge 2/27 25 6.8 0.0 Battle Creek (A) 16G9 5700 Bear Creek 7800 2/27 51 12.8 9.4 15H1 Bull Basin (A) 16G10 5600 2/27 6 1.6 0.2 35 10.2 2.3 Fox Creek 2/27 15H2 6800 23 7.2 0.0 Hyde Pasture 16G5 5800 2/26 Mud Flat 2/26 27 7.3 0.0 16G7 5500 0.6 Red Canyon (A) 16G11 6650 2/27 27 7.3 49 14.1 1.4 Silver City 16F3 6400 3/1 South Mountain 2/26 36 12.0 1.6 16G1 6340 Succor Creek (A) 16F6 6100 2/27 27 7.8 0.4 2/26 8 2.8 0.0 Triangle 16G4 5150 PAYETTE RIVER 2/28 24.0 20.3 Big Creek Summit 15E2 6608 71 16.8 Bogus Basin 2/28 50 9.0 16F2 6120 Cozy Cove 15E8 5900 2/26 39 12.1 4.3 7.0 0.0 Crawford R. S. 2/28 28 15E3 4800 Deadwood Airstrip 2/27 38 12.0 3.6 15E10 5440 Deadwood Dam 15E7 5500 2/26 38 11.8 5.0 Deadwood Summit 30.8 25.8 15E4 7000 2/25 85 Greenfield Flat (A) 2/27 29.4 28.7 16E7 7370 87 11.9 2.3 High Valley Summit 16E4 2/28 39 5170 Lake Fork 15E1 6000 2/25 49 14.6 5.5

11.6\*

40.8\*

16.9\*

9.4%

14.8\*

31.7\*

21.8\*

16.3\*

7.4%

16.4\*

43.0\*

15.8\*

17.1\*

-34.2\*

6.6

---

14.9

5.2

13.5

15.0

25.0

15.7

11.4

| WEISER RIVER   |               |      |      |    |      |      |       |
|----------------|---------------|------|------|----|------|------|-------|
| Boulder Creek  | 16D1          | 5500 | 2/27 | 51 | 17.3 | 9.4  | 20.2* |
| Mica Ridge (A) | 16E6          | 6800 | 2/27 | 71 | 24.1 | 15.2 |       |
| Placer Creek   | 16E2          | 6000 | 2/27 | 45 | 12.6 | 7.1  | 15.4* |
| Squaw Flat (A) | 16 <b>E</b> 5 | 6230 | 2/27 | 60 | 20.3 | 9.1  |       |

2/25

2/25

2/27

2/25

46

44

78

48

16E1

15E5

15D2

16E3

5200

5700

5800

5200

Rock Flat Summit

Squaw Meadow

Tripod Summit

Silver Creek Ridge

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average. (A) Aerial observation: Water content estimated.

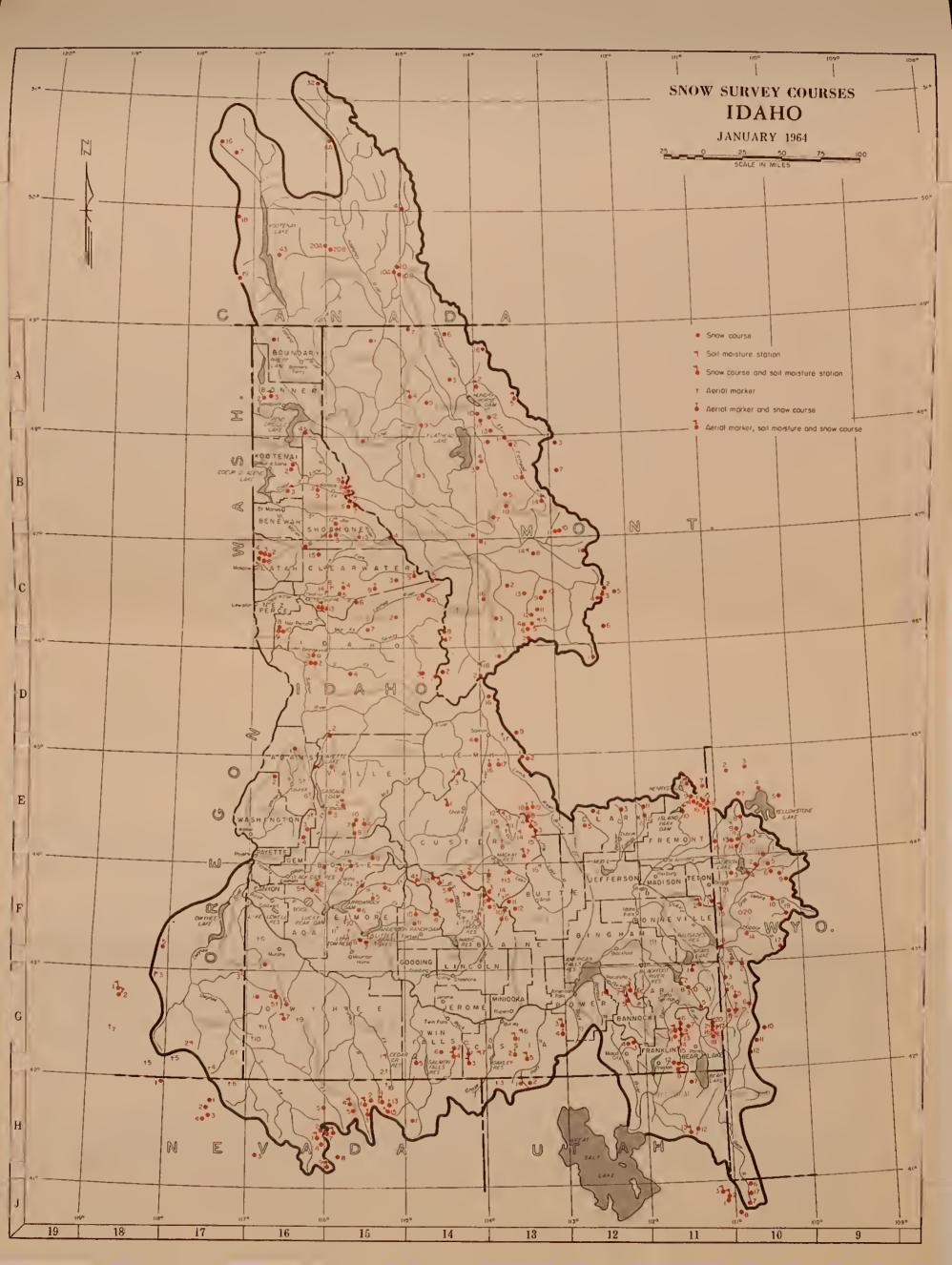
| SNOW                  |            | CUF       | RENT INFORMA | PAST RECORD      |                       |           |         |
|-----------------------|------------|-----------|--------------|------------------|-----------------------|-----------|---------|
| DRAINAGE BASIN and SI | NOW COURSE | DATE OF   | SNOW DEPTH   | WATER<br>CONTENT | WATER CONTENT (Inches |           |         |
| NAME ,                | NO.        | ELEVATION | SURVEY       | (Inches)         | (Inches)              | LAST YEAR | AVERAGE |
| SALMON RIVER          |            |           |              |                  |                       |           |         |
| Big Creek Summit      | 15E2       | 6608      | 2/28         | 71               | 24.0                  | 20.3      | 31.7    |
| Borah (A)             | 13E8       | 8250      | 3/3          | 23               | 5.8                   |           | ca es   |
| Chapman Creek         | 16D2       | 4215      | 2/27         | 18               | 5.0                   | 0.0       | 2.3     |
| Deadwood Summit       | 15 E4      | 7000      | 2/25         | 85               | 30.8                  | 25.8      | 43.0    |
| Salena Summit         | 14F12      | 8795      | 2/29         | 55               | 17.2                  | 14.9      | 20.3    |
| Sibbons Pass          | 13D2       | 7100      | 2/26         | 63               | 18.8                  | 16.6      | 22.2    |
| Johns Creek           | 16D3       | 3805      | 2/27         | 8                | 2.5                   | 0.0       | 2.8     |
| fill Creek Summit     | 14E1       | 8870      | 3/2          | 54               | 16.0                  | 13.7      |         |
| loose Creek           | 13D16      | 6200      | 2/27         | 52               | 16.2                  | 8.5       | 15.4    |
| forgan Creek Summit   | 14E4       | 7580      | 2/29         | 40               | 10.2                  | 8.4       |         |
| ledfish Lake          | 14E2       | 6600      | 3/2          | 32               | 8.3                   |           |         |
| lock Flat Summit      | 16E1       | 5200      | 2/25         | 46               | 13.5                  | 6.6       | 17.     |
| Win Peaks (A)         | 14E3       | 10300     | 3/3          | 64               | 18.8                  | 11.8      |         |
| ienna Mine (A)        | 14F4       | 8900      | 2/29         | 63               | 19.7                  | 20.1      | 31.4    |
| Thitebird Summit      | 16D5       | 4390      | 2/27         | 27               | 7.8                   | 0.4       | 4.8     |
| Milliams Creek Smt.   | 14D4       | 7800      | 2/28         | 32               | 9.6                   | 7.9       | 12.0    |
| Lemhi River           |            |           |              |                  |                       |           |         |
| bove Gilmore          | 13E19      | 8200      | 2/26         | 30               | 7.2                   | 6.2       |         |
| spen-Hall Pass        | 13E21      | 8110      | 2/27         | 29               | 6.0                   |           |         |
| lopes Camp            | 13E17      | 7500      | 2/27         | 28               | 5.2                   | 5.0       |         |
| ertson Creek (A)      | 13D17      | 8050      | 2/28         | 32               | 8.0                   | 2.0       |         |
| all Creek             | 13E20      | 7560      | 2/27         | 18               | 3.6                   |           |         |
| leadow Lake           | 13E18      | 9100      | 2/26         | 52               | 14.5                  | 10.8      |         |
| LEARWATER RIVER       |            |           |              |                  |                       |           |         |
| bove Greer            | 16C11      | 1240      | 2/29         | 0                | 0.0                   | 0.0       |         |
| ayuse Airstrip        | 15C3       | 3700      | 2/26         | 40               | 13.4                  | 4.6       | 11.9    |
| Coolwater Mountain    | 15C7       | 6200      | 2/26         | 70               | 24.4                  |           |         |
| rater Meadows         | 15C9       | 6100      | 2/26         | 98               | 37.5                  | 22.7      |         |
| lk Butte              | 16C15      | 5550      | 2/25         | 105              | 38.5                  | 13.3      |         |
| ish Lake Airstrip     | 15C2       | 5000      | 2/26         | 105              | 35.4                  | 21.2      | 39.5    |
| 'orest                | 16C9       | 4550      | 2/25         | 27               | 7.1                   | 0.0       | -       |
| orty-nine Meadows     | 15B3       | 5000      | 2/25         | 83               | 30.3                  | 13.9      | 33.0    |
| Goat Lake             | 14C9       | 6600      | 2/26         | 105              | 38.1                  | 35.6      |         |
| ranite Peak           | 15B13      | 6000      | 2/25         | 95               | 34.5                  | 28.5      |         |
| reer Summit           | 16C13      | 3000      | 2/29         | 0                | 0.0                   | 0.0       |         |
| lemlock Butte         | 15C6       | 5500      | 2/26         | 126              | 47.4                  | 26.0      |         |
| olo Pass              | 14C5       | 5230      | 2/27         | 76               | 28.4                  | 17.5      | 32.9    |
| ost Lake              | 15B14      | 6000      | 2/25         | 124              | 49.4                  | 31.8      |         |
| IcCann                | 16C8       | 4300      | 2/25         | 22               | 6.0                   | 0.0       |         |
| ledicine Ridge        | 15B4       | 6150      | 2/25         | 102              | 35.1                  |           | es es   |

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. \* Estimated 1943-57, 15 year Average. (A) Aerial observation: Water content estimated.

| SNOW                    |          | ſ          | cui              | RRENT INFORMA          | PAST RECORD |           |           |
|-------------------------|----------|------------|------------------|------------------------|-------------|-----------|-----------|
| DRAINAGE BASIN and SNOW | DATE OF  | SNOW DEPTH | WATER<br>CONTENT | WATER CONTENT (Inches) |             |           |           |
| NAME                    | NO.      | ELEVATION  | SURVEY           | (Inches)               | (Inches)    | LAST YEAR | AVERAGE b |
|                         |          |            |                  |                        |             |           |           |
| Midway                  | 16C12    | 2200       | 2/29             | 0                      | 0.0         | 0.0       |           |
| Nez Perce Pass          | 14D1     | 6575       | 2/27             | 49                     | 16.0        | 9.0       | 16.8*     |
| Orogrande Mountain      | 15D4     | 7800       | 2/25             | 90                     | 32.0        | ~ ~       |           |
| Pierce Rgr. Sta.        | 15C5     | 3171       | 2/26             | 43                     | 13.2        | 4.0       | 11.0*     |
| Powell Rgr. Sta.        | 14C6     | 4230       | 2/27             | 42                     | 15.0        | 7.3       | 14.6*     |
| Savage Pass             | 14C4     | 6600       | 2/28             | 64                     | 22.4        | 18.6      |           |
| Shanghai Summit         | 15C4     | 4600       | 2/26             | 75                     | 26.3        | 8.8       |           |
| Sweeney                 | 16C10    | 4435       | 2/25             | 22                     | 5.8         | 0.0       |           |
| PALOUSE RIVER           |          |            |                  |                        |             |           |           |
| Crumarine Creek         | 16C6     | 3500       | 2/28             | 33                     | 11.2        | 0.0       | 6.7*      |
| East Twin               | 16C3     | 4000       | 2/28             | 49                     | 19.5        | 0.0       | 11.4*     |
| Howard Creek            | 16C5     | 3500       | 2/28             | 31                     | 10.2        | 0.0       | 3.3*      |
| Moscow Mountain         | 16C2     | 4800       | 2/28             | 58                     | 20.2        | 3.5       | 16.6*     |
| West Twin               | 16C4     | 4200       | 2/28             | 40                     | 14.0        | 0.0       | 10.7*     |
|                         |          | GREAT      | BASIN            | <u> </u>               |             |           |           |
| BEAR RIVER              |          |            |                  |                        |             |           |           |
| Emigrant Summit         | 11G6     | 7350       | 2/25             | 56                     | 15.4        | 14.6      |           |
| Emigration Canyon       | 11G7     | 6500       | 2/25             | 28                     | 7.2         | 6.7       | ~ ~       |
| Montpelier Creek        |          |            |                  |                        |             |           |           |
| Giveout                 | 11G16    | 6840       | 2/24             | 36                     | 9.1         | 5.9       | -         |
| Little Beaver           | 11G20    | 6970       | 2/24             | 43                     | 13.6        | 8.6       |           |
| Montpelier Creek        | 11G18    | 6570       | 2/24             | 24                     | 6.1         | 4.1       | · · ·     |
| Whiskey Flat            | 11G21    | 6985       | 2/24             | 24                     | 7.5         | 4.5       |           |
| Mink Creek              |          |            |                  |                        |             |           |           |
| Christensen Ranch       | 11G11    | 5600       | 2/26             | 28                     | 7.1         | 0.0       |           |
| Dry Basin (A)           | 11G14    | 7900       | 2/29             | 67                     | 18.4        | 17.3      |           |
| Horseshoe Basin (A)     | 11G15    | 8000       | 2/29             | 56                     | 15.4        | 19.8      |           |
| Liberty Spring (A)      | 11G13    | 8600       | 2/29             | 85                     | 23.4        | 16.1      |           |
| Strawberry Creek        | 11G9     | 5800       | 2/27             | 35                     | 8.3         | 1.3       | 11.4*     |
| Strawberry-Mink Divide  | 11G10    | 6800       | 2/27             | 51                     | 14.4        | 6.8       | 19.8*     |
| Cub River-Malad Rive    | <u>r</u> |            |                  |                        |             |           |           |
| Cub River R. S.         | 11G12    | 5400       | 2/26             | 30                     | 8.3         | 0.0       | 8.9*      |
| Willow Flat             | 11G4     | 6100       | 2/26             | 43                     | 12.6        | 5.5       | 14.6*     |
| Dry Creek Flat          | 12G4     | 6350       | 2/25             | 29                     | 7.0         | T         | 7.2*      |
| Oxford Mountain         |          |            |                  |                        |             |           |           |

<sup>(</sup>b) 1943-57, 15 year period. # Not located directly on this drainage. • Estimated 1943-57, 15 year Average.

(A) Aerial observation: Water content estimated.



# Index to IDAHO SNOW COURSES

| NO. STATE WANT   | i E   | SEC. TWP. RGE. E   | ELEV.                   | ND. STOT                       | € MAME  |                             | THP, MCI.                                     |                         | HD, STAT                        | £ SAME   |                 | 18F, 85E,                       |                              | WQ, 51/                           | LTE RAWE  | LAT, AND LONG   |
|--|---|--|-------------------------|--------------------------------|---|-----------------------------|---|-------------------------|---------------------------------|--|-----------------|---------------------------------|------------------------------|-----------------------------------|---|---|
| KOO<br>15511 H Farre<br>1_ALM H Frush  |   | 36 26N 31W   | 5500<br>5000            | 1002A WY                       | Blind Bull<br>Erymn Flat  | 6<br>9                      | 34N 115W<br>38N 115W                          | 8750<br>6250            | 13E4 I<br>1)E7KA 1              | Savmill Canyon<br>Wet Greek Summit                                 | 17<br>15        | 124 258<br>BN 258               | 6700<br>8175                 | 161/a :<br>16E;a :<br>16F2 1      | Mica Ridge<br>Squaw Flar<br>Planar Crass  | 15 158 2g 6200<br>32 178 22 6230<br>15 5 16 178 3W 6000   |
| 16 BC Fergus<br>10 BC Fermic<br>7 BC German  | .e  | 50°33' 11°°17'   | 3500<br>6000            | 1063 WY                        | Garyon<br>CO^ Camp<br>C 4: nword Lake                             | 25                          | 110°30°<br>29N 118V<br>31N 118V               | 74 ho<br>7500           | 13F) 1<br>13F13+ I              | Big LOST RIVER Beer Canyon Cherry Crock Page                       | 26<br>7         | 5N 21E<br>5h 23E                | 8/10<br>8/1                  | 11814 1                           | SALMON RIVER  | 13 13% 762 8200   |
| _3 90 Gray 0<br>23F BO Kimber  | Creek   | 76.071, 712.020, 716.071, 712.020, 716.071, 712.020, 716.071, 717.020, 717. | 3800<br>5101            | 1 E10 VY<br>1051A VY           | Coulter Crock Doadson Hanch East Rim Dir de                       |                             | 3.N 116V<br>37N 111W                          | 600<br>6534<br>1795 1   | 1362A 1<br>13611 I<br>13612 1   | Cupper Basin<br>Iron Bog<br>Leadbalt                               | 24<br>23<br>34  | 4% 21E<br>4% 23E<br>4% 23       | 8000<br>765 I<br>7 JF        | 15Ellm   1<br>17En   1<br>16' - ' | Blg Flat<br>rah<br>'hapman ree's  | 25 11N 23E 7050<br>21 10g 23g 3250<br>16 27N 28 4215  |
|  | ssey Riige<br>a                               |  | 610<br>3051<br>410      | 1076 VY<br>11EE3 VY            | F ur Mile Mondows<br>Lieds Crock<br>Oreys Boundary                | 12<br>33                    | 458 1124<br>484 116V<br>378 118V              | 777<br>7230<br>5 70     | 12538 4<br>12715a 1             | Lost Wo 1 Ufrida<br>North Fork Meadov<br>Sitokrook                 | 19<br>20<br>17  | 6% 1.4E<br>2E 1AE<br>4M 22E     | 87°<br>150                   | 13517A 1<br>13517H 1              | r Clawa Gamp<br>wintin ine k<br>Ld St. w  | y         18%         28         7500           22         2287         438         8950           14         85         16%         8100 |
| 15Al M Red Mo<br>28 BC Sampor  | Contain                                       | [6e20, 11.e;7,   | 67:00<br>3°<br>45:0     | 10719 27<br>1063 VI            | Fur Yentre Sumit<br>umover Fara Bivide<br>Hurkleberry Divide      | 27<br>12                    | 11W<br>13W 11W<br>18W 11W                     | 8750<br>7500<br>7300    | 13114a 1<br>14F2A 1<br>13 1fa 1 | Stint y Mill<br>Twin Banks<br>White Koob                           | 91<br>77<br>71  | 69 198<br>48 2 8<br>78 338      | 7500<br>1:                   | 100 m 1                           | Johns resk<br>Light Pass<br>Lower gilst   | 9 297 2E 3875<br>9 5/6 159 7480<br>70 128 24E 6500  |
| 16Al I Smith<br>20A BC Sulliv  | van Mine<br>Mik River                         | 29 64N 79' 126° 12'  | 5500<br>4400            | 10E4 WT                        | Hase Camp<br>Louf - Lake Divide<br>H ran                          | 44034                       | 110°24'<br>110°40'                            | 7850<br>7700<br>68 1    | 1371 1                          | SIG WOOD RIVER   | 16              | 34 15E                          | 620                          | 10E1 = 1<br>10E24<br>14E84 7      | Managany Bar<br>Mead v Lake<br>Hill re k 5 mmi'.  | 1 . T 23E 7000<br>24 102 26E 9100<br>6 1.3 17E 887  |
| lul? Y Weasel  | 1 Divide<br>ST RIVER                          |  | 5-5                     | 10.3 VY<br>1°E2 VY             | M.ren Bay<br>Worms ween<br>Polson Meadows                         |                             | 458 116W<br>116°42'                           | 6800<br>1500<br>4500    | 14178 -<br>14,124 3<br>1455 1   | wiens Sumit  | 3               | 6N 15E<br>7N 15F<br>1N 17E      | 7 61<br>- 18<br>- 10         | 141 A 1                           | M so resk<br>Morgan Creak<br>Patulmer 1   | 27 4 27 27 217 220<br>32 184 198 7580<br>1 Y 248 750  |
| 1611 : Benton  | n Meadov<br>n Spring                          |  | 2 ±<br>4°00             | 1 % VI                         | Sal: River Summit<br>Snais River Station<br>Snow King Muuntain #) | 32                          | 198 11 W<br>198 11 W<br>4 B 11 W              | 7900<br>6™≥<br>76 x     | 147 1                           | Mascut Kins<br>Purt haldy  | 8<br>16<br>19   | 48 - 0<br>48 - 11 F<br>28 - 14E | 100<br>100<br>1105           | 1)mea 1                           | Scrupp's Laxe<br>  Trail Cro-1<br>  .vi- fem-3  | 14 . TE 22.5 8501<br>17 106 15W 7090<br>1 N . TE 909  |
| PEND<br>13013 H Black  | OREILLE - CLARK                               | 23 AN ISW  | :                       | 1 ES VT                        | Sylvan Para Riceb Divido T. Fu. ton Pass                          | 12<br>210-21                | 57N 1179<br>11 /235'                          | 7100<br>in.             | 10/11 1                         | Little WOOD RIVER Article Ranger Catt :                            |                 | N 21F                           | £554.                        | 1.7.a<br>14:k<br>1   , n          | Vi .a Mine<br>  Vesting Suring<br>  Will bord Jamin   | 4 AE 697<br>449 238 6951  |
| 12510 M Copper<br>12511 M Cotter   | man Reservoir<br>r Creek<br>r Mine            | 1 1(7 %<br>2 15% %   | 62.20<br>57 1<br>62.50  | 1 F5 VT                        | Turpin Medown Tollowjacket  | 14<br>33                    | 3n 11. v                                      | 1030                    | 13.10 1                         | Iron Mine Sre * Prid   | 3.<br>25        | 19 237<br>31 218<br>34 7 7      | 1 3                          | 140 1                             | H. Lines Green S  CLEARWATER RIVER  | - 9 25 4399<br>- 19 1.5 7500  |
| 13011 N Fred 8   | rado Mica<br>Aur Pass                         | 23 88 12V<br>12 69 134   | 1270<br>1310<br>81.00   |                                | HENRYS FORK RIVER   | 3                           | 144 448<br>138 45F                            | ይሳ<br>ግ/አይ              | 14. % 1<br>14F140 I             | N. continui<br>F. roupine<br>Ovede Trak                            | 4               | N . F<br>38 -17<br>. h l        | 50                           | 16 %<br>1 514m                    | Af e resr<br>; rown   | 1, 35% 25 12,0<br>1; 35% 35 35  |
| 13010 M Gold C<br>1501 M Ecodoo  | etovn Lake<br>Greek Lake<br>o Greek           | 14 88 199<br>9 148 279   | 6450<br>7200<br>64.10   | 11618 1<br>11619 1<br>1.825 VI | E ack Canyon<br>Binck Moose<br>urassy Lake<br>Island Park         | 33                          | 143 45E<br>493 11W<br>11W 43E                 | 1.5<br>"230<br>6315     | 13F6 1                          | Telfer Ranch  BOISE RIVER  Atlanta S.mait                          | 24              | 54 1                            |                              | 1 × 1509A                         | are Aeres y<br>C. veter Mc tea n<br>I Crater Meadows  | 4 388 11E 3700<br>34 338 8E 6200<br>2 378 9E 6100   |
| 13Cl_m M Intred  | cht firest<br>cht Forest                      | 13 13N 11N   | 7 10<br>7 10<br>7 10    | 11014 1                        | Latham Springs  | 9 2                         | 138 45E<br>138 45E<br>438 44E                 | 69ng<br>250             | 15 Ø 1<br>15F"                  | ad Jear<br>betnett M. antain<br>.gas asin Road                     | 35              | H .E<br>.S /E<br>5H JE          | 505<br>536.                  | 16015A<br>1475<br>1508m           | f Elk Buste<br>1 i b Laca Auro'rip<br>hl  | 6 404 18 5550<br>35 358 31E 5000<br>16 368 5E 3450  |
| 12D1 H Fipest<br>13C12 M Bed Li  |   | 10 16 TV :   | 6330<br>7202<br>7103    | 11E7 ;<br>11D2 1               | Old med<br>Pompher's Gabin<br>Yelley Viru                         | 11<br>7                     | ,3N 4°E<br>15N 44E<br>13S 5E                  | 500<br>6500<br>6700     | 16 4<br>16 5=<br>157 40         | gus Asin Road<br>Camas Creeza Divido                               | ii              | 58 2E<br>23 4E<br>.0 14E        | 183<br>572<br>6 e z          | 16 9<br>15 3<br>1409A             | 1 Frightine Mediour 1 Cost lake   | 1 328 3V 4550<br>6 438 72 5000<br>4 38¶ 13E 6600  |
| 1305 F Southe<br>1201 M Stempl   | Rock Mountain<br>ern Cross<br>le Pass         | 9 5H 13V   | 7100<br>6500<br>6900    |                                | TETON RIVER   |                             | LIN 115V                                      | 8250                    | 14F 14 1<br>15F A 1<br>16 1 1   | . 'h Saml'<br>Pantent<br>Panten sulct                              | 1 24            | 19 E<br>74 E                    | 1.5<br>1.5<br>52             | ,t*,3                             | i meer Summit  i.m. k lifte  I. Eft Tarson Parture  | 13 35M 2E 3000<br>10 36M 6E 5500<br>27M 16E 4700  |
|  | : Mill<br>Re Greek, Lower                     | 19 95 13V<br>15 8V 6W  | 5500<br>6250            | TIFIN I                        | Darby Canyon<br>Plne Creek Pass<br>State Line                     | 2.,                         | 3N AE<br>3N 46E                               | 67 5<br>64,041<br>85,00 | 151 '<br>15194 1<br>15737a 1    | Divis (1.<br>Jackson Peak<br>Little Camon F at                     | 13<br>21        | EN 11:                          | 495<br>495                   | 15B144<br>1-68                    | H I l Twos<br>l Lost Lake<br>l M Tath   | 1' 108 248 5230<br>16 438 48 6000<br>1- 358 78 280  |
|  | le Creek, Middle<br>le Greek, Upper<br>Intain | 19 8N SV :   | 6890<br>800*<br>6890    |                                | CAMAS - BEAVER CREEK  | 2L                          | 714 118A                                      |                         | 15 13s 3<br>15 1M 1<br>15F6 1   | Long I<br>M. res Creez Sumit<br>Prairie                            | 19<br>19<br>13  | 13 E<br>8 E<br>24 TE            | 455 1<br>13,00<br>5603       | 16012H<br>14_1<br>1514            | 1 Midway<br>N Sosperne Es a<br>1 rogranda Mountain  | 14 35% 28 2200<br>35 15 244 6575<br>24 20% 68 7800  |
| BITTE  | ERROOT RIVER                                  | 28 94 18m  | 61.75                   | 11E1 1<br>12E) 1<br>11E12 1    | Blue Ledge Mire<br>Cump Greek<br>Kilgore                          | 27<br>21<br>6               | 13N 38E<br>13N 34E<br>12N 34E                 | 6700<br>680<br>6-50     | 15F3A I<br>15F5A I<br>15F31e I  | Road Creek Trinity Housesin Willow Creek Cable                     | 5               | 59 E<br>3N 2E<br>1N 6E          | (&5)<br>74 4<br>471          | 1503<br>1400<br>1404              | 1 Pierce Ranger Staffon<br>1 Powell Hanger Staffon<br>1 Dayage Pasa                           | 2 %W 55 3171<br>33 37W 1_B 4530<br>49 36W 152 6600  |
| 1351 M East Fo   | Fork Ranger Station                           | 16 28 17s<br>4 28 590  | 51.70<br>71.00<br>71.00 | 1274 1                         | MEDICINE LODGE CREE   | 8                           | 13W 33E                                       | 7.32                    | 162 1                           | OWYHEE RIVER<br>Antelupe Ridge                                     |                 | 85 fE                           | 5 478                        | 1504A<br>16010                    | I Shanghal Summit I Sweeney   | 778 68 4600<br>324 34 4.35  |
| 1407 M Lost R<br>1402 M Nesper   |   | 5 4% 23%<br>19 15 23V  | 59.60<br>5580<br>7259   | 12E5 1                         | BLACKFOOT RIVER   | 73                          | 124 328                                       | 6700                    |                                 | derren Valley<br>caffle Freek<br>ig Be-1                           | 1 3             | 275 54E<br>115 E<br>458 %1      | 4 X<br>573<br>6 3            | 1606                              | PALOUSE RIVER   | 24 408 54 3500<br>13 408 54 3500  |
| 1408 M Tyla L  | Lakes   |  | 6510                    | 1153 I<br>11628 I<br>1169 I    | Austin Brothers Ranc (<br>China lat<br>Slug Gre x Divide          | 28<br>37<br>15              | 78 47<br>16 44                                | 6450<br>630<br>225      |                                 | luo M untain fess asquel<br>11 stn<br>ilsaster Pear                | , 3<br>p        | 383 42E<br>1 S / W<br>47H SLE   | 5-7<br>5000<br>650           | 1603<br>1605<br>1602              | 1 East Twin<br>1 Howard Creek<br>1 Mostrov Mountain   | 14 404 5W 3500<br>18 40W 4W 4500  |
| 13914A M Basin 6   | Peak  | 13 24% 25V   | 5000<br>5150            | 1151K 1                        | PORTNEUF RIVER  | 19                          | 53 43r  | 710                     | 1 scH& 0<br>1F+3G (<br>15H7 S   | 7 lly arm Cummett<br>ry Canyon                                     | 4<br>31         | )75 )1E<br>)35 E<br>4,14 54E    | 77710<br>4450<br>6 01        | 1604                              | BEAR RIVER  |   |
| 13E3 M Big Cr.<br>13A17 M Cemp H:<br>13A2M M Desert  | isery   | ∋0 288 18V (   | 6755<br>6200<br>5600    | 1205K 1<br>125m 1<br>125m 1    | Despeoy Creek Lover Retble  | 5 7                         | 103 381;<br>11                                | 678 )<br>121<br>5400    | 1515 N<br>1 4 V<br>1 35a J      | hold Ireck<br>Frankte Peak<br>Syd Feature                          | SFi J           | 45% 55E<br>44% 39E<br>S 2V      | 6600<br>800<br>5800          | 11611<br>11612                    | Wy Big Park Christansen Racit Cut River Ranger Stati  | 27 1'S LIE 550°<br>5 155 LIE 5400   |
| LAN X Griffi   | Creek<br>Kuntain<br>In Creek Divide           | 20 228 10V 1<br>11 288 25V   | \$\$99<br>7000<br>\$150 | 15 % T                         | Mink Greek<br>Pobble Greek  | 33<br>34                    | 75 34E<br>78 77£                              | 630)<br>655             | 17:3a C<br>17:3a C              | Jacks Feak<br>Jerian Vallay<br>Lauret Oraz                         | (8<br>2         | 22% 538<br>303 4/E<br>45% 53F   | 8,25<br>4390<br>0            | 11- RF<br>1166M<br>1167           | Dry Rread Prod<br>I Enigrant (unit<br>I Enigrati 'anyon (mouth)                               | 21 1.3 2° 715<br>24 128 428 6500  |
| 13813A M Holbron   | tehn  | 18 219 130 .<br>14 37N 22W   | 5770<br>4530<br>3285    | 1352£ 1<br>1382£ U             | RAFT RIVER  Boy Scout Comp  Clear Creek Medicus                   | 12<br>7t                    | 145 P.E<br>14N 14W                            | 1611                    | 1 ∧= 0<br>17 da +<br>1710 N     | is had Butta<br>I use Cany n<br>'sper uckerin                      | ?7<br>2*        | 498 47E<br>498 44E<br>459 E     | 54.5<br>644.0<br>6 1         | 11688<br>11878<br>1036            | I Frankli sein U Sarden City Samult U Schdman Raich   | 1 165 17 500<br>15 1.4 45 500<br>16 34 175 500  |
|  | : Pais<br>il Creek                            | 34 308 14V 29 358 17W  | 4300<br>5250<br>4000    | 13% 1<br>1377# 1<br>13H1 U     | Conner Pass<br>Kowell Canyon<br>One File Summer                   | 35<br>P                     | 1.5 FE<br>138 LY<br>148 149                   | 57.24<br>2004<br>7330   | 1(alm n<br>178) n<br>1(3 n      | l wer Jack reek<br>Kartin Creek<br>Hidas                           | 18<br>18<br>18  | 443 4HE<br>3 8 461              | 6 F                          |                                   | U Tayden F rk Wy Kelly Banger Statl U Hunte Crist R. S.                                       | 1 18 9g 9300<br>13 164 1186 2000<br>3 88 48 8361  |
| 13A10 M Strawb   | onkon<br>ed Sear Moustain<br>Serry Leke       | 23 25% 15V '   | 3800<br>7000<br>6500    | 1305M 1<br>1303M 1<br>1344A 1  | Streep Wollow Sublott Summit Springe                              | 4<br>E<br>1\$               | 145 241.<br>125 3 F<br>135 Vil.               | 6200<br>(-00<br>9500    | 16578 .<br>1765a<br>1 Ba B      | Mod .ad<br>Oregon Canyen<br>Quirm Ridge                            | 1               | 48 40E<br>478 41E               | 55<br>6 M -<br>630           | 17/10                             | W Pinsy Labarge x<br>U Stillwafor Cast<br>1 Strawborry Mink Divide                            | 10 198 1149 8820<br>30 38 35 6550<br>14 135 418 6800  |
| 13A12 M Trout 1  | Sreeks  | 21 28W 17W   | 6500<br>3600<br>3580    | 14639 1                        | GOOSE - TRAPPER CREE  |                             | 153 174                                       | <i>6</i> 20             | 1 311e i<br>1286H N<br>1/ 3 1   | Red Canyon   | N               | 115 4W<br>438 51E<br>*3 3W      | 645<br>64<br>64              | 119-M<br>119-P                    | 1 Strawbarry Creek<br>1 Will w Flat   | 2 145 ALE 5570<br>2 145 ALE 6170  |
| 1385 M Upper 1<br>1283 M Wrong 1   | Rollard<br>Ridge                              |  | 7000<br>4800            | 1461A 1<br>1467a 1<br>1383s U  | Restettor Hunger Station<br>Frapper Greek<br>Vi Pont              | 35<br>2<br>17               | 145 178<br>158 - E<br>14N 179                 | 75 JO<br>5300<br>7670   | 1951HE 0<br>1631 1<br>16,6 3    | Silvies<br>South Hountain<br>Surer Creek                           | 35<br>11<br>25  | 3 3 33E<br>15 %                 | (9)                          | 15/4<br>12/4                      | MALAD RIVER  I Dry 'reek Flat  Cxford H untain  | 31 115 37E 6357<br>TO 135 TE 6800   |
| SPOK   1588   I   Above   1587   I   Above   |   |  | 4100                    | 158DMA 8                       | SALMON FALLS CR E   |                             |   | 78:00                   | 158:44 V<br>151° 8<br>1/ 448 1  | Zaylor Ganyon<br>re wan Runch<br>rlangie                           | 35<br>11 2°     | 398 53E<br>338 55E<br>78 3E     | 6 1<br>5 4<br>51%            | 11016                             | MONTPELIER CREEK  | 16 115 15E 6F4  |
| 1585 1 Belov.<br>1682 : Copper   | Roland<br>Ridge                               | 34 47N 68<br>6 6 7 30N 1V  | 4350<br>3770<br>4800    | 1405A 2<br>1464H 1<br>15H2 N   | Cedar Creek<br>Deadling<br>Fox Gronk                              | 25<br>25                    | 153 10E<br>148 18E<br>4/8 58E                 | 7000<br>6900<br>6900    | 1865a O<br>1781 B<br>1682 4     |  | 10<br>11        | 45N 37E<br>42N 53E              | 725 )                        | 11 d2m<br>11 d m<br>11 d m        | i dve ut Pa s<br>von n Rar h<br>little Seaves   | 17S 458 7025<br>15 17S 458 65   |
|  |   | 3 42N 8E<br>19 42N 3E  | 3100<br>6000<br>5560    | 15H13A H<br>15H15A H<br>14H1 H | Gost Greek  | 31<br>6<br>6                | 458 60E<br>458 60E<br>428 62E                 | 8400<br>8945            | 1867n O                         |  | )1              | 35ts 12 )//                     |                              | 11518                             | 1 Hotpelier Creak<br>1 Whiskey lat  | 125 45E 65 7<br>11S 45E   |
| 1584 I Medici  | Sanda Craek<br>Ins Ridge                      | 32 51B 1W<br>24 43N 10E  | 5250<br>31,00<br>6150   | 1202 1<br>1501m 1<br>150148 H  | Hagic Fountain<br>Fatrick Ranch<br>Pole Creek Hanger Sintion      | 14<br>23<br>13              | 14S 18E<br>15S 12E                            | 7,000<br>6700<br>5770   | 15658 1<br>16628 1<br>4568 1    | Hig Crook Sumpli<br>Bogus Paste<br>Cosy Covo                       | 24<br>16<br>19  | 15N 5E<br>5N 3E<br>11N 7E       | 68 (8<br>63.20<br>5(8)0      |                                   |   |   |
| 15812 I Outlav<br>15852 I Ruland   | ito Kidge<br>/ Croex<br>! Samit               | 19 6/1 5E<br>26 678 6E   | 911.7<br>3755<br>5890   |                                | Red Point<br>Deventy Six Creek<br>Shodbone Basin                  | 15                          | 46H STE<br>47H 61E<br>44H 5HE                 | 8330<br>7940<br>7100    | 1583 1<br>15810 1<br>1587 1     | Grawford Hanger Station<br>Dendwood Atruttip<br>Dendwood Hiver Dam | 21<br>R<br>B    | 14N 4E<br>11B 7E<br>11N 7E      | 54,13                        |                                   | LEGEND  | 1.3   |
| 1559A 1 Sunset   |   | 28 AM 58   | 32:00<br>56:00          | 150%a i                        | Wilson Greek LITTLE LOST RIVER                                    | 2./,<br>2./,                | 145 17E<br>168 12E                            | 5740<br>7510            | 15E6A 1<br>16E6a 1<br>16E4 1    | Deadwood Summit<br>Greenfield Hat<br>High Valley Summit            | 23              | 14N 7F<br>13N 2E<br>11R 2E      | 5,1%<br>7370<br>7370<br>5170 | 1011                              | Numbering System (  SHOW COURSE ONLY SHOW COURSE AND PRECIPITATION                            |   |
| 1064 WT After Ranger Station 33 378 1182 6290 1383M 1 Fairview Count Station 27 12N 768 6750 148 |   |  |                         |                                |   | 1501 1<br>1671 1<br>1502A 1 | lake Fork<br>Nock Fint Summit<br>Squaw Meadov | 3<br>1<br>5             | 18N 41,<br>18N 2E<br>218 4E     | 67000<br>5270  | 10 JTM<br>TOJTA | SHOW COURSE AND ADDLE MOTORTURE | STATION,                     |                                   |   |   |
| 1972 W Aster 0<br>1972 W Saze 0<br>1977 W Slanks   | Camp  | 20 460 1127 -  | 7700<br>6900<br>8(/)/)  | 1385a I<br>1385 I<br>1386 I    | Little Lost Fast<br>Lost-Garffeld<br>Hoonshins                    | 36<br>3<br>31               | 11N 26E<br>11H 26E<br>13N 26E                 | 6/40<br>6/00<br>7450    | 16E) ]                          | Tripod Summit WEISER RIVER   | 17              | 118 38                          | 5800<br>5200                 | 1031mr<br>1031mr                  | THOS COURSE, BOYL MOISTURS ST<br>SECO COURSE, SOIL MOISTURS ST<br>SOIL MOISTURS STATION ORLY. | ATION AND PRECEPITATION SAU!  |
|  |   | 2241   | ,                       | z znike [                      | Nielson's Draw  | 265                         | 11N N2K                                       | 6401                    | 1601 1                          | Boulder Creek  | 15              | 50M JA                          | 5500                         | 10110                             | AIRIAE MARKIR ONLY.<br>STORAGE PRECIPITATION RAGE ON  | LY,   |

### Agencies Assisting with Snow Surveys, etc.

### GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

### States:

Idaho State Reclamation Engineer
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

### Federal:

- U. S. Army Engineers
- U. S. Department of Agriculture
  Forest Service
  Agricultural Research Service
- U. S. Department of Commerce Weather Bureau
- U. S. Department of the Interior
  Bonneville Power Administration
  Bureau of Reclamation
  Fish and Wildlife Service
  Geological Survey
  Indian Service
  National Park Service
  Bureau of Land Management

### PUBLIC UTILITIES

The Montana Power Company Washington Water Power Company Idaho Power Company Utah Power and Light Company

### ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

### PRIVATE CORPORATIONS

Amalgamated Sugar Company

FEDERAL - STATE - PRIVATE

# COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"

# FIRST CLASS MAIL

Library, Current Serial Record U.S. Department of Agriculture Washington 25, D.C.